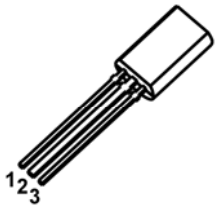
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92L Plastic-Encapsulate Transistors

TO – 92L



1. EMITTER
2. COLLECTOR
3. BASE

2SA1160 TRANSISTOR (PNP)

FEATURES

- High DC Current Gain and Excellent h_{FE} Linearity
- Low Saturation Voltage

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-20	V
V_{CEO}	Collector-Emitter Voltage	-10	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current	-2	A
P_C	Collector Power Dissipation	900	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	139	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-1mA,I_E=0	-20			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-10mA,I_B=0	-10			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-1mA,I_C=0	-6			V
Collector cut-off current	I_{CBO}	V_{CB}=-20V,I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-6V,I_C=0			-0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-1V, I_C=-0.5A	140		600	
	$h_{FE(2)}$	V_{CE}=-1V, I_C=-4A	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-2A,I_B=-0.05A			-0.5	V
Base-emitter voltage	V_{BE}	V_{CE}=-1V, I_C=-2A			-1.5	V
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0, f=1MHz		50		pF
Transition frequency	f_T	V_{CE}=-1V,I_C=-0.5A		140		MHz

CLASSIFICATION OF $h_{FE(1)}$

RANK	A	B	C
RANGE	140-280	200-400	300-600